

Data Validation Checklist

Semivolatile Organic Analyses

Project: 35TH Avenue Superfund Site
 Laboratory: TestAmerica - Savannah, GA¹
 Method: SW-846 8270C Low-Level (PAH)
 Matrix: Soil
 Reviewer: Karen Marie Trujillo
 Concurrence²: Nicole Lancaster

Project No: 15268508.20000
 Job ID.: 680-85534-4
 Associated Samples: Refer to Attachment A (Sample Summary)
 Samples Collected: 12/05/2012 & 12/06/2012
 Date: 1/15/2013
 Date: 2/11/2013

Review Questions	Yes	No	N/A	Samples (Analytes) Affected/Comments	Flag
1. Were sample storage and preservation requirements met? If temperature >6°C, then J/UJ-flag results.	✓				
2. Were all COC records signed and integrity seals intact, indicating that COC was maintained for all samples?	✓				
3. Were there any problems noted in laboratory data package concerning condition of samples upon receipt?		✓			
4. Do any soil samples contain more than 50% water? If yes, then results are to be reported on a wet-weight basis.		✓			
5. Were holding times met (\leq 7 and 14 days from collection to extraction for aqueous and solid samples, respectively; \leq 40 days from extraction to analysis)? If not, then J/UJ-flag sample results. If grossly (2x) exceeded, then flag J/R.	✓				
6. Were results for all project-specified target analytes reported?	✓				
7. Were project-specified Reporting Limits achieved for undiluted sample analyses?	✓				
8. Were samples with analyte concentrations exceeding the calibration range of the instrument re-analyzed at a higher dilution? If not, then J-flag sample result.	✓				
9. Was a method blank extracted with each batch (i.e., one per 20 samples, per batch, per matrix and per level)?	✓				
10. Were target analytes detected in the method blank?		✓			
11. Were target analytes detected in equipment/rinsate blanks?		✓		PAHs were not detected during the analysis of rinsate blank 120412-RB-Bowls+Spoons (680-85402-21).	
	✓			According to the QAPP, a rinsate blank is to be	

¹ All analytical work subcontracted to TestAmerica of Tampa, FL

² Independent technical reviewer

Data Validation Checklist (Continued)

Review Questions	Yes	No	N/A	Samples (Analytes) Affected/Comments	Flag
12. Are equipment/rinsate blanks associated with every sample? If no, note in DV report.				collected after each decontamination event, which occurs once per week per the client. A rinsate blank (120412-RB-Bowls+Spoons) was collected during the week of 12/03/12. The rinsate blank was analyzed for PAHs under Test America Job ID 680-85402-2.	
13. Were analytes detected in samples below the blank contamination action level? If yes, U-flag positive sample results <5x associated blank concentration (10x for common blank contaminants – phthalates)			✓	Blank contamination does not exist.	
14. Is a field duplicate associated with this Job?	✓			HP0022B-CSD (680-85534-52) is a field duplicate of HP0022B-CS (680-85534-51)	
15. Was precision deemed acceptable as defined by the project plans?	✓			Refer to Attachment B (Field Duplicate Evaluation)	
16. Were DFTPP ion abundance criteria met? If no, professional judgment may be applied to determine to what extent the data may be utilized.	✓			According to the original Form Vs included in the data package, SW-846 Method 8270C ion abundance criteria were not met; however, a review of raw data indicates that alternate tuning criteria were used by the laboratory (i.e., EPA Method 525). Ion abundance criteria were met per EPA Method 525. Revised Form Vs were provided by the laboratory on 02/11/2013 (refer to Attachment C).	
17. Were samples analyzed within 12 hours of the DFTPP tune? If no, professional judgment may be applied to determine to what extent the data may be utilized.	✓				
18. Were initial and continuing calibration standards analyzed at the proper frequency for each instrument? <ul style="list-style-type: none"> • Ensure that a minimum of five standards are used for the initial calibration. If no, use professional judgment to determine the effect on the data and note in the reviewer narrative. • An initial calibration is to be associated with each sample analysis. • A continuing calibration standard is to be analyzed for every 12 hours of sample analysis per instrument. 	✓			<ul style="list-style-type: none"> • Instrument ID: BSMA5973 • Initial Calibration: 11/26/2012 • ICV: 11/26/12 @ 15:35 • CCV: 12/20/12 @ 15:06 • Instrument ID: BSMC5973 • Initial Calibration: 11/29/2012 • ICV: 11/29/12 @ 13:25 • CCV: 12/18/12 @ 11:34 • Instrument ID: BSMD5973 • Initial Calibration: 12/06/2012 • ICV: 12/06/12 @ 14:37 • CCV: 12/19/12 @ 10:48 	

Data Validation Checklist (Continued)

Review Questions	Yes	No	N/A	Samples (Analytes) Affected/Comments	Flag
				• CCV: 12/21/12 @ 10:34	
19. Were calibration results within laboratory/project specifications? • ICAL (Criteria: ≤ 15 mean %RSD with no individual CCC %RSD ≤ 30 ($\leq 50\%$ for poor performers), OR $r \geq 0.995$, OR $r^2 \geq 0.99$, and RRF ≥ 0.050 (≥ 0.010 for poor performers)): ○ If %RSD > 15 ($> 50\%$ for poor performers), or $r < 0.995$, or $r^2 < 0.995$, then J-flag positive results and UJ-flag non-detects ○ If mean RRF < 0.050 (< 0.010 for poor performers), then J-flag positive results and R-flag non-detects • ICV and CCV (Criteria: $\leq 20\%D$ ($\leq 50\%$ for poor performers) and RF ≥ 0.050 (≥ 0.010 for poor performers)): ○ If %D > 20 ($> 50\%$ for poor performers), then J-flag positive results and UJ-flag non-detects ○ If RF < 0.050 (< 0.010 for poor performers), then UJ-flag non-detected semivolatile target compounds	✓				
20. Was a LCS prepared for each batch and matrix?	✓				
21. Were LCS recoveries within lab control limits? If no, J-flag positive results when %R > Upper Control Limit (UCL) and J/R-flag results when %R < Lower Control Limit (LCL).	✓				
22. Were LCS/LCSD RPD within lab specifications? If no, J-flag positive results and UJ-flag non-detects			✓	LCS Only	
23. Was a MS/MSD pair extracted at the proper frequency (one per 20 samples per batch)?	✓				
24. Is the MS/MSD parent sample a project-specific sample?	✓			• Prep Batch 132509: 680-85534-18 (FM0165CC-CS), MS/MSD • Prep Batch 132745: 680-85534-18 (Batch sample), MS/MSD. Lab sample 680-85534-18 is a project-specific sample (FM00165A-CS) and results were reported under Job ID 680-85534-2.	
25. Were MS/MSD recoveries within laboratory/project specifications? <i>Only QC results for project samples are evaluated.</i> • If the native sample concentration > 4x spiking level, then an evaluation of interference is not possible. • If either MS or MSD recovery meets control limits, qualification of data is not warranted.	✓				

Data Validation Checklist (Continued)

Review Questions	Yes	No	N/A	Samples (Analytes) Affected/Comments	Flag
<ul style="list-style-type: none"> • MS and MSD %R<10: J and R Flag positive and ND results, respectively • MS and MSD %R >10 and <LCL: J-Flag positive and UJ-flag non-detect results • MS and MSD R% >UCL (or 140): J-Flag positive results 					
26. Were laboratory criteria met for precision during the MS/MSD analysis? <i>Only QC results for project samples are evaluated.</i> <ul style="list-style-type: none"> • If the native sample concentration > 4x spiking level, then an evaluation of interference is not possible. • If %RPD > UCL, J-flag positive result and UJ-flag non-detect result 	✓				
27. Were surrogate recoveries within lab/project specifications? <ul style="list-style-type: none"> • If %R for 1 Acid or BN surrogates <10, then J-flag positive and R-flag non-detect associated sample results • If 2 or more Acid or BN %R >UCL, then J-flag positive results • If 2 or more Acid or BN %R ≥10%, but <LCL, then J-flag positive results and UJ-flag non-detect results • If 2 or more Acid or BN , with 1 %R >UCL and 1 %R ≥10%, but <LCL, then J-flag positive results and UJ-flag non-detect results 	✓				
28. Were internal standard (IS) results within lab/project specifications? <ul style="list-style-type: none"> • If IS area counts are less than 50% of the midpoint calibration standard, then J-flag positive and UJ-flag non-detect associated sample results • If IS area counts are greater than 100% of the midpoint calibration standard, then J-flag positive results • If extremely low area counts are reported or performance exhibits a major abrupt drop-off, then a severe loss of sensitivity is indicated, J-flag positive and R-flag non-detect results • If retention time of sample's internal standard is not within 30 seconds of the associated calibration standard, R-flag associated data. • The chromatographic profile for that sample must be examined to determine if any false positives or negatives exists. For shifts of large magnitude, the reviewer may 	✓				

Data Validation Checklist (Continued)

Review Questions	Yes	No	N/A	Samples (Analytes) Affected/Comments	Flag
consider partial or total rejection of the data for that sample fraction. Positive results need not be qualified as R, if mass spectral criteria are met.					
29. Were lab comments included in report?	✓			Refer to Attachment C (Case Narrative)	
Comments: The data validation was conducted in accordance with the <i>Non-Industrial Use Property Sampling Event QAPP for the 35th Avenue Removal Site, Birmingham, Alabama, Revision 1</i> (OTIE, October 2012). The data review process was modeled after the <i>USEPA Contract Laboratory Program (CLP) National Functional Guidelines (NFG) for Organic Methods Data Review</i> (EPA, October 1999) and <i>USEPA CLP NFG for Low Concentration Organic Methods Data Review</i> (EPA, June 2001). Sample results have been qualified based on the results of the data review process (Attachment D). Criteria for acceptability of data were based upon available site information, analytical method requirements, guidance documents, and professional judgment.					

DV Flag Definitions:

- J The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
 R The sample results are unusable. The analyte may or may not be present in the sample.
 U The analyte was analyzed for, but was not detected above the associated level; blank contamination may exist.
 UJ The analyte was not detected above the limit, and the limit is approximate and may be inaccurate or imprecise.

ATTACHMENT A

SAMPLE SUMMARY

Sample Summary

Client: Oneida Total Integrated Enterprises LLC
 Project/Site: 35th Avenue Superfund Site

TestAmerica Job ID: 680-85534-4
 SDG: 68085534-3

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
680-85534-51	HP0022B-CS	Solid	12/05/12 14:10	12/07/12 09:24
680-85534-52	HP0022B-CSD	Solid	12/05/12 14:10	12/07/12 09:24
680-85534-54	HP0067B-CS	Solid	12/05/12 15:20	12/07/12 09:24
680-85534-55	CV0442A-CS-SP	Solid	12/05/12 13:56	12/07/12 09:24
680-85534-56	CV0442B-CS-SP	Solid	12/05/12 14:14	12/07/12 09:24
680-85585-1	FM0165CC-CS	Solid	12/06/12 08:55	12/08/12 09:17
680-85585-2	FM0165DD-CS	Solid	12/06/12 08:58	12/08/12 09:17
680-85585-3	FM0165EE-CS	Solid	12/06/12 09:00	12/08/12 09:17
680-85585-4	FM0165FF-CS	Solid	12/06/12 09:20	12/08/12 09:17
680-85585-5	FM0165GG-CS	Solid	12/06/12 09:25	12/08/12 09:17
680-85585-6	FM0165HH-CS	Solid	12/06/12 10:05	12/08/12 09:17
680-85585-7	FM0165II-CS	Solid	12/06/12 10:07	12/08/12 09:17
680-85585-8	FM0165JJ-CS	Solid	12/06/12 11:00	12/08/12 09:17
680-85585-9	FM0165KK-CS	Solid	12/06/12 11:05	12/08/12 09:17
680-85585-10	FM0165LL-GS	Solid	12/06/12 10:59	12/08/12 09:17
680-85585-11	FM0165MM-GS	Solid	12/06/12 11:25	12/08/12 09:17
680-85585-12	FM0165NN-GS	Solid	12/06/12 11:31	12/08/12 09:17
680-85585-13	FM0165OO-GS	Solid	12/06/12 11:41	12/08/12 09:17
680-85585-14	CV0641A-CS-SP	Solid	12/06/12 09:20	12/08/12 09:17

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ATTACHMENT B

FIELD DUPLICATE EVALUATION

Evaluation of Field Duplicate Results

Attachment B

Analyte	HP0022B-CS 680-85534-51		RL	HP0022B-CSD 680-85534-52		RL	Unit	Avg. RLx5	RPD	Absolute difference	2x Avg RL	Action	
Acenaphthene	26	J	130		33	J	130	µg/kg	650	NA	7	260	None, absolute difference \leq 2x Avg RL
Acenaphthylene	140		50		130		50	µg/kg	250	NA	10	100	None, absolute difference \leq 2x Avg RL
Anthracene	140		11		140		11	µg/kg	55	0	NA	NA	None, RPD \leq 50%
Benzo(a)anthracene	780		10		700		10	µg/kg	50	11	NA	NA	None, RPD \leq 50%
Benzo(a)pyrene	1100		13		1100		13	µg/kg	65	0	NA	NA	None, RPD \leq 50%
Benzo(b)fluoranthene	1500		15		1400		15	µg/kg	75	7	NA	NA	None, RPD \leq 50%
Benzo(g,h,i)perylene	850		25		870		25	µg/kg	125	2	NA	NA	None, RPD \leq 50%
Benzo(k)fluoranthene	640		10		630		10	µg/kg	50	2	NA	NA	None, RPD \leq 50%
Chrysene	810		11		770		11	µg/kg	55	5	NA	NA	None, RPD \leq 50%
Dibenzo(a,h)anthracene	240		25		230		25	µg/kg	125	4	NA	NA	None, RPD \leq 50%
Fluoranthene	830		25		740		25	µg/kg	125	11	NA	NA	None, RPD \leq 50%
Fluorene	30		25		29		25	µg/kg	125	NA	1	50	None, absolute difference \leq 2x Avg RL
Indeno(1,2,3-cd)pyrene	720		25		710		25	µg/kg	125	1	NA	NA	None, RPD \leq 50%
1-Methylnaphthalene	160		50		150		50	µg/kg	250	NA	10	100	None, absolute difference \leq 2x Avg RL
2-Methylnaphthalene	370		50		380		50	µg/kg	250	3	NA	NA	None, RPD \leq 50%
Naphthalene	1000		50		1100		50	µg/kg	250	10	NA	NA	None, RPD \leq 50%
Phenanthrene	540		10		530		10	µg/kg	50	2	NA	NA	None, RPD \leq 50%
Pyrene	750		25		680		25	µg/kg	125	10	NA	NA	None, RPD \leq 50%

Note: If the analyte was not detected, then the cell was left blank.

µg/kg - micrograms per kilogram

NA - Not applicable

RL - Reporting limit

RPD - Relative percent difference

Precision is based on either the absolute difference between sample results or RPD. If the sample results are less than or equal to 5x's the RL, then precision is based on the absolute difference between duplicate results. If sample results >5x's RL, then precision is evaluated using RPD. J-Flag sample results whenever the absolute difference is greater than the RL (2x for soils) or the RPD >20% (50% for soil). Table above presents the results for detected analytes only.

ATTACHMENT C

DATA PACKAGE ADDENDUM

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Tampa

Job No.: 680-85534-4

SDG No.: 68085534-3

Lab File ID: 1AK26002.D DFTPP Injection Date: 11/26/2012

Instrument ID: BSMA5973 DFTPP Injection Time: 13:33

Analysis Batch No.: 131833

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0 % of mass 442	22.5
68	Less than 2.0 % of mass 69	0.5 (1.4)1
69	Mass 69 relative abundance	33.2
70	Less than 2.0 % of mass 69	0.6 (1.8)1
127	10.0 - 80.0 % of mass 442	33.6
197	Less than 2.0 % of mass 198	1.3 (1.7)2
198	Greater than 50.0 % of mass 442	76.0
199	5.0 - 9.0 % of mass 198	5.5 (7.3)2
275	10.0 - 60.0 % of mass 442	24.3
365	Greater than 1.0 % of mass 442	3.7
441	Present but less than mass 443	12.3
442	Base Peak, 100% relative abundance	100.0
443	15.0 - 24.0 % of mass 442	18.0

1-Value is % mass 69

2-Value is % mass 198

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 660-131833/3	1AK26003.D	11/26/2012	13:48
	IC 660-131833/4	1AK26004.D	11/26/2012	14:04
	IC 660-131833/5	1AK26005.D	11/26/2012	14:19
	IC 660-131833/6	1AK26006.D	11/26/2012	14:34
	ICIS 660-131833/7	1AK26007.D	11/26/2012	14:50
	IC 660-131833/8	1AK26008.D	11/26/2012	15:05
	IC 660-131833/9	1AK26009.D	11/26/2012	15:20
	ICV 660-131833/10	1AK26010.D	11/26/2012	15:35

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Tampa

Job No.: 680-85534-4

SDG No.: 68085534-3

Lab File ID: 1AL20002.D DFTPP Injection Date: 12/20/2012

Instrument ID: BSMA5973 DFTPP Injection Time: 14:26

Analysis Batch No.: 132818

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0 % of mass 442	38.3
68	Less than 2.0 % of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	42.3
70	Less than 2.0 % of mass 69	0.0 (0.0)1
127	10.0 - 80.0 % of mass 442	35.7
197	Less than 2.0 % of mass 198	0.0 (0.0)2
198	Greater than 50.0 % of mass 442	93.2
199	5.0 - 9.0 % of mass 198	8.1 (8.7)2
275	10.0 - 60.0 % of mass 442	25.6
365	Greater than 1.0 % of mass 442	5.0
441	Present but less than mass 443	9.5
442	Base Peak, 100% relative abundance	100.0
443	15.0 - 24.0 % of mass 442	20.8

1-Value is % mass 69

2-Value is % mass 198

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 660-132818/3	1AL20003.D	12/20/2012	15:06
	MB 660-132745/1-A	1AL20005.D	12/20/2012	17:25
	LCS 660-132745/2-A	1AL20006.D	12/20/2012	17:39
FM0165JJ-CS	680-85585-8	1AL20007.D	12/20/2012	17:54
FM0165KK-CS	680-85585-9	1AL20008.D	12/20/2012	18:09
FM0165LL-GS	680-85585-10	1AL20009.D	12/20/2012	18:25
FM0165MM-GS	680-85585-11	1AL20010.D	12/20/2012	18:40
FM0165NN-GS	680-85585-12	1AL20011.D	12/20/2012	18:55
FM0165OO-GS	680-85585-13	1AL20012.D	12/20/2012	19:10
CV0641A-CS-SP	680-85585-14	1AL20013.D	12/20/2012	19:25

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Tampa

Job No.: 680-85534-4

SDG No.: 68085534-3

Lab File ID: 1CK29002.D DFTPP Injection Date: 11/29/2012

Instrument ID: BSMC5973 DFTPP Injection Time: 10:59

Analysis Batch No.: 131957

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0 % of mass 198	27.7
68	Less than 2.0 % of mass 69	0.3 (0.7)1
69	Mass 69 relative abundance	37.9
70	Less than 2.0 % of mass 69	0.2 (0.6)1
127	10.0 - 80.0 % of mass 198	44.0
197	Less than 2.0 % of mass 198	1.2
198	Base Peak, 100% relative abundance	100.0
199	5.0 - 9.0 % of mass 198	6.8
275	10.0 - 60.0 % of mass 198	23.2
365	Greater than 1.0 % of mass 198	3.6
441	Present but less than mass 443	11.7
442	Greater than 50.0 % of mass 198	81.2
443	15.0 - 24.0 % of mass 442	16.8 (20.7)2

1-Value is % mass 69

2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 660-131957/3	1CK29003.D	11/29/2012	11:16
	IC 660-131957/4	1CK29004.D	11/29/2012	11:34
	IC 660-131957/5	1CK29005.D	11/29/2012	11:53
	IC 660-131957/6	1CK29006.D	11/29/2012	12:11
	ICIS 660-131957/7	1CK29007.D	11/29/2012	12:29
	IC 660-131957/8	1CK29008.D	11/29/2012	12:48
	IC 660-131957/9	1CK29009.D	11/29/2012	13:06
	ICV 660-131957/10	1CK29010.D	11/29/2012	13:25

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Tampa

Job No.: 680-85534-4

SDG No.: 68085534-3

Lab File ID: 1CL18002.D DFTPP Injection Date: 12/18/2012

Instrument ID: BSMC5973 DFTPP Injection Time: 11:17

Analysis Batch No.: 132652

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0 % of mass 442	27.6
68	Less than 2.0 % of mass 69	0.6 (1.8)1
69	Mass 69 relative abundance	34.4
70	Less than 2.0 % of mass 69	0.3 (0.9)1
127	10.0 - 80.0 % of mass 442	37.0
197	Less than 2.0 % of mass 198	0.0 (0.0)2
198	Greater than 50.0 % of mass 442	91.6
199	5.0 - 9.0 % of mass 198	6.5 (7.1)2
275	10.0 - 60.0 % of mass 442	20.7
365	Greater than 1.0 % of mass 442	2.7
441	Present but less than mass 443	14.7
442	Base Peak, 100% relative abundance	100.0
443	15.0 - 24.0 % of mass 442	19.8

1-Value is % mass 69

2-Value is % mass 198

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 660-132652/3	1CL18003.D	12/18/2012	11:34
	MB 660-132509/1-A	1CL18008.D	12/18/2012	13:16
	LCS 660-132509/2-A	1CL18009.D	12/18/2012	13:36
HP0022B-CS	680-85534-51	1CL18010.D	12/18/2012	13:55
HP0022B-CSD	680-85534-52	1CL18011.D	12/18/2012	14:13
HP0067B-CS	680-85534-54	1CL18012.D	12/18/2012	14:32
CV0442A-CS-SP	680-85534-55	1CL18013.D	12/18/2012	14:50
CV0442B-CS-SP	680-85534-56	1CL18014.D	12/18/2012	15:08
FM0165CC-CS	680-85585-1	1CL18015.D	12/18/2012	15:27
FM0165CC-CS MS	680-85585-1 MS	1CL18016.D	12/18/2012	15:45
FM0165CC-CS MSD	680-85585-1 MSD	1CL18017.D	12/18/2012	16:04
FM0165DD-CS	680-85585-2	1CL18018.D	12/18/2012	16:22
FM0165EE-CS	680-85585-3	1CL18019.D	12/18/2012	16:40
FM0165FF-CS	680-85585-4	1CL18021.D	12/18/2012	17:17
FM0165GG-CS	680-85585-5	1CL18022.D	12/18/2012	17:36
FM0165HH-CS	680-85585-6	1CL18023.D	12/18/2012	17:54
FM0165II-CS	680-85585-7	1CL18024.D	12/18/2012	18:12

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Tampa

Job No.: 680-85534-4

SDG No.: 68085534-3

Lab File ID: 1DL06002.D DFTPP Injection Date: 12/06/2012

Instrument ID: BSMD5973 DFTPP Injection Time: 11:28

Analysis Batch No.: 132234

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0 % of mass 198	43.1
68	Less than 2.0 % of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	46.3
70	Less than 2.0 % of mass 69	0.0 (0.0)1
127	10.0 - 80.0 % of mass 198	53.7
197	Less than 2.0 % of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 - 9.0 % of mass 198	7.6
275	10.0 - 60.0 % of mass 198	26.7
365	Greater than 1.0 % of mass 198	2.8
441	Present but less than mass 443	9.2
442	Greater than 50.0 % of mass 198	63.5
443	15.0 - 24.0 % of mass 442	12.5 (19.7)2

1-Value is % mass 69

2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 660-132234/3	1DL06003.D	12/06/2012	11:59
	IC 660-132234/4	1DL06004.D	12/06/2012	12:21
	IC 660-132234/5	1DL06005.D	12/06/2012	12:44
	IC 660-132234/6	1DL06006.D	12/06/2012	13:07
	ICIS 660-132234/7	1DL06007.D	12/06/2012	13:29
	IC 660-132234/8	1DL06008.D	12/06/2012	13:52
	IC 660-132234/9	1DL06009.D	12/06/2012	14:14
	ICV 660-132234/10	1DL06010.D	12/06/2012	14:37

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Tampa

Job No.: 680-85534-4

SDG No.: 68085534-3

Lab File ID: 1DL19002.D

DFTPP Injection Date: 12/19/2012

Instrument ID: BSMD5973

DFTPP Injection Time: 10:29

Analysis Batch No.: 132707

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0 % of mass 442	29.1
68	Less than 2.0 % of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	31.2
70	Less than 2.0 % of mass 69	0.0 (0.0)1
127	10.0 - 80.0 % of mass 442	39.9
197	Less than 2.0 % of mass 198	0.0 (0.0)2
198	Greater than 50.0 % of mass 442	93.6
199	5.0 - 9.0 % of mass 198	6.2 (6.6)2
275	10.0 - 60.0 % of mass 442	27.0
365	Greater than 1.0 % of mass 442	4.2
441	Present but less than mass 443	15.5
442	Base Peak, 100% relative abundance	100.0
443	15.0 - 24.0 % of mass 442	18.8

1-Value is % mass 69

2-Value is % mass 198

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 660-132707/2	1DL19003.D	12/19/2012	10:48
FM0165II-CS DL	680-85585-7 DL	1DL19015.D	12/19/2012	15:38

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Tampa

Job No.: 680-85534-4

SDG No.: 68085534-3

Lab File ID: 1DL21002.D DFTPP Injection Date: 12/21/2012

Instrument ID: BSMD5973 DFTPP Injection Time: 10:16

Analysis Batch No.: 132831

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0 % of mass 442	30.6
68	Less than 2.0 % of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	33.8
70	Less than 2.0 % of mass 69	0.3 (0.8)1
127	10.0 - 80.0 % of mass 442	43.8
197	Less than 2.0 % of mass 198	0.0 (0.0)2
198	Greater than 50.0 % of mass 442	99.6
199	5.0 - 9.0 % of mass 198	6.5 (6.5)2
275	10.0 - 60.0 % of mass 442	27.6
365	Greater than 1.0 % of mass 442	3.5
441	Present but less than mass 443	15.7
442	Base Peak, 100% relative abundance	100.0
443	15.0 - 24.0 % of mass 442	17.8

1-Value is % mass 69

2-Value is % mass 198

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 660-132831/3	1DL21003.D	12/21/2012	10:34
FM0165MM-GS DL	680-85585-11 DL	1DL21006.D	12/21/2012	11:43
FM0165NN-GS DL	680-85585-12 DL	1DL21007.D	12/21/2012	12:05

ATTACHMENT D

CASE NARRATIVE

Case Narrative

Client: Oneida Total Integrated Enterprises LLC
Project/Site: 35th Avenue Superfund Site

TestAmerica Job ID: 680-85534-4
SDG: 68085534-3

Job ID: 680-85534-4

Laboratory: TestAmerica Savannah

Narrative

CASE NARRATIVE

Client: Oneida Total Integrated Enterprises LLC

Project: 35th Avenue Superfund Site

Report Number: 680-85534-4, 680-85585-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT

The samples were received on 12/7/2012 9:24 AM and 12/8/2012 9:17 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 5 coolers at receipt time were 0.3° C, 0.4° C, 0.6° C, 0.6° C and 0.8° C.

SEMICVOLATILE ORGANIC COMPOUNDS BY GCMS - LOW LEVEL SEMIVOLATILE ORGANIC COMPOUNDS BY GCMS - LOW LEVEL

Samples HP0022B-CS (680-85534-51), HP0022B-CSD (680-85534-52), HP0067B-CS (680-85534-54), CV0442A-CS-SP (680-85534-55) and CV0442B-CS-SP (680-85534-56) were analyzed for Semivolatile Organic Compounds by GCMS - Low Level in accordance with EPA SW-846 Method 8270C. Samples FM0165CC-CS (680-85585-1), FM0165DD-CS (680-85585-2), FM0165EE-CS (680-85585-3), FM0165FF-CS (680-85585-4), FM0165GG-CS (680-85585-5), FM0165HH-CS (680-85585-6), FM0165II-CS (680-85585-7), FM0165JJ-CS (680-85585-8), FM0165KK-CS (680-85585-9), FM0165LL-GS (680-85585-10), FM0165MM-GS (680-85585-11), FM0165NN-GS (680-85585-12), FM0165OO-GS (680-85585-13) and CV0641A-CS-SP (680-85585-14) were analyzed for Semivolatile Organic Compounds by GCMS - Low Level in accordance with EPA SW-846 Method 8270C.

Method(s) 8270C LL: The following samples were diluted due to the color of the extracts: HP0067B-CS (680-85534-54). Elevated reporting limits (RL) are provided. Batch: 132652.

ATTACHMENT E

QUALIFIED SAMPLE RESULTS

Client Sample Results

Client: Oneida Total Integrated Enterprises LLC
 Project/Site: 35th Avenue Superfund Site

TestAmerica Job ID: 680-85534-4
 SDG: 68085534-3

Client Sample ID: HP0022B-CS

Date Collected: 12/05/12 14:10
 Date Received: 12/07/12 09:24

Lab Sample ID: 680-85534-51

Matrix: Solid
 Percent Solids: 79.4

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	26	J	130	25	ug/Kg	⊗	12/14/12 12:54	12/18/12 13:55	1
Acenaphthylene	140		50	6.3	ug/Kg	⊗	12/14/12 12:54	12/18/12 13:55	1
Anthracene	140		11	5.3	ug/Kg	⊗	12/14/12 12:54	12/18/12 13:55	1
Benzo[a]anthracene	780		10	4.9	ug/Kg	⊗	12/14/12 12:54	12/18/12 13:55	1
Benzo[a]pyrene	1100		13	6.5	ug/Kg	⊗	12/14/12 12:54	12/18/12 13:55	1
Benzo[b]fluoranthene	1500		15	7.7	ug/Kg	⊗	12/14/12 12:54	12/18/12 13:55	1
Benzo[g,h,i]perylene	850		25	5.5	ug/Kg	⊗	12/14/12 12:54	12/18/12 13:55	1
Benzo[k]fluoranthene	640		10	4.5	ug/Kg	⊗	12/14/12 12:54	12/18/12 13:55	1
Chrysene	810		11	5.7	ug/Kg	⊗	12/14/12 12:54	12/18/12 13:55	1
Dibenz(a,h)anthracene	240		25	5.2	ug/Kg	⊗	12/14/12 12:54	12/18/12 13:55	1
Fluoranthene	830		25	5.0	ug/Kg	⊗	12/14/12 12:54	12/18/12 13:55	1
Fluorene	30		25	5.2	ug/Kg	⊗	12/14/12 12:54	12/18/12 13:55	1
Indeno[1,2,3-cd]pyrene	720		25	8.9	ug/Kg	⊗	12/14/12 12:54	12/18/12 13:55	1
1-Methylnaphthalene	160		50	5.5	ug/Kg	⊗	12/14/12 12:54	12/18/12 13:55	1
2-Methylnaphthalene	370		50	8.9	ug/Kg	⊗	12/14/12 12:54	12/18/12 13:55	1
Naphthalene	1000		50	5.5	ug/Kg	⊗	12/14/12 12:54	12/18/12 13:55	1
Phenanthrene	540		10	4.9	ug/Kg	⊗	12/14/12 12:54	12/18/12 13:55	1
Pyrene	750		25	4.7	ug/Kg	⊗	12/14/12 12:54	12/18/12 13:55	1
Surrogate							Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>	73						12/14/12 12:54	12/18/12 13:55	1

Client Sample ID: HP0022B-CSD

Date Collected: 12/05/12 14:10
 Date Received: 12/07/12 09:24

Lab Sample ID: 680-85534-52

Matrix: Solid
 Percent Solids: 79.7

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	33	J	130	25	ug/Kg	⊗	12/14/12 12:54	12/18/12 14:13	1
Acenaphthylene	130		50	6.3	ug/Kg	⊗	12/14/12 12:54	12/18/12 14:13	1
Anthracene	140		11	5.3	ug/Kg	⊗	12/14/12 12:54	12/18/12 14:13	1
Benzo[a]anthracene	700		10	4.9	ug/Kg	⊗	12/14/12 12:54	12/18/12 14:13	1
Benzo[a]pyrene	1100		13	6.5	ug/Kg	⊗	12/14/12 12:54	12/18/12 14:13	1
Benzo[b]fluoranthene	1400		15	7.7	ug/Kg	⊗	12/14/12 12:54	12/18/12 14:13	1
Benzo[g,h,i]perylene	870		25	5.5	ug/Kg	⊗	12/14/12 12:54	12/18/12 14:13	1
Benzo[k]fluoranthene	630		10	4.5	ug/Kg	⊗	12/14/12 12:54	12/18/12 14:13	1
Chrysene	770		11	5.7	ug/Kg	⊗	12/14/12 12:54	12/18/12 14:13	1
Dibenz(a,h)anthracene	230		25	5.2	ug/Kg	⊗	12/14/12 12:54	12/18/12 14:13	1
Fluoranthene	740		25	5.0	ug/Kg	⊗	12/14/12 12:54	12/18/12 14:13	1
Fluorene	29		25	5.2	ug/Kg	⊗	12/14/12 12:54	12/18/12 14:13	1
Indeno[1,2,3-cd]pyrene	710		25	8.9	ug/Kg	⊗	12/14/12 12:54	12/18/12 14:13	1
1-Methylnaphthalene	150		50	5.5	ug/Kg	⊗	12/14/12 12:54	12/18/12 14:13	1
2-Methylnaphthalene	380		50	8.9	ug/Kg	⊗	12/14/12 12:54	12/18/12 14:13	1
Naphthalene	1100		50	5.5	ug/Kg	⊗	12/14/12 12:54	12/18/12 14:13	1
Phenanthrene	530		10	4.9	ug/Kg	⊗	12/14/12 12:54	12/18/12 14:13	1
Pyrene	680		25	4.7	ug/Kg	⊗	12/14/12 12:54	12/18/12 14:13	1
Surrogate							Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>	66						12/14/12 12:54	12/18/12 14:13	1

TestAmerica Savannah

Client Sample Results

Client: Oneida Total Integrated Enterprises LLC
 Project/Site: 35th Avenue Superfund Site

TestAmerica Job ID: 680-85534-4
 SDG: 68085534-3

Client Sample ID: HP0067B-CS

Date Collected: 12/05/12 15:20
 Date Received: 12/07/12 09:24

Lab Sample ID: 680-85534-54

Matrix: Solid
 Percent Solids: 83.5

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	480	U	480	96	ug/Kg	⊗	12/14/12 12:54	12/18/12 14:32	4
Acenaphthylene	190	U	190	24	ug/Kg	⊗	12/14/12 12:54	12/18/12 14:32	4
Anthracene	36	J	40	20	ug/Kg	⊗	12/14/12 12:54	12/18/12 14:32	4
Benzo[a]anthracene	130		38	19	ug/Kg	⊗	12/14/12 12:54	12/18/12 14:32	4
Benzo[a]pyrene	89		50	25	ug/Kg	⊗	12/14/12 12:54	12/18/12 14:32	4
Benzo[b]fluoranthene	200		58	29	ug/Kg	⊗	12/14/12 12:54	12/18/12 14:32	4
Benzo[g,h,i]perylene	72	J	96	21	ug/Kg	⊗	12/14/12 12:54	12/18/12 14:32	4
Benzo[k]fluoranthene	62		38	17	ug/Kg	⊗	12/14/12 12:54	12/18/12 14:32	4
Chrysene	140		43	21	ug/Kg	⊗	12/14/12 12:54	12/18/12 14:32	4
Dibenz(a,h)anthracene	20	J	96	20	ug/Kg	⊗	12/14/12 12:54	12/18/12 14:32	4
Fluoranthene	160		96	19	ug/Kg	⊗	12/14/12 12:54	12/18/12 14:32	4
Fluorene	96	U	96	20	ug/Kg	⊗	12/14/12 12:54	12/18/12 14:32	4
Indeno[1,2,3-cd]pyrene	58	J	96	34	ug/Kg	⊗	12/14/12 12:54	12/18/12 14:32	4
1-Methylnaphthalene	140	J	190	21	ug/Kg	⊗	12/14/12 12:54	12/18/12 14:32	4
2-Methylnaphthalene	120	J	190	34	ug/Kg	⊗	12/14/12 12:54	12/18/12 14:32	4
Naphthalene	67	J	190	21	ug/Kg	⊗	12/14/12 12:54	12/18/12 14:32	4
Phenanthrene	180		38	19	ug/Kg	⊗	12/14/12 12:54	12/18/12 14:32	4
Pyrene	160		96	18	ug/Kg	⊗	12/14/12 12:54	12/18/12 14:32	4
Surrogate		%Recovery	Qualifier		Limits		Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>		71			30 - 130		12/14/12 12:54	12/18/12 14:32	4

Client Sample ID: CV0442A-CS-SP

Date Collected: 12/05/12 13:56
 Date Received: 12/07/12 09:24

Lab Sample ID: 680-85534-55

Matrix: Solid
 Percent Solids: 86.7

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	120	U	120	23	ug/Kg	⊗	12/14/12 12:54	12/18/12 14:50	1
Acenaphthylene	13	J	46	5.8	ug/Kg	⊗	12/14/12 12:54	12/18/12 14:50	1
Anthracene	15		9.7	4.9	ug/Kg	⊗	12/14/12 12:54	12/18/12 14:50	1
Benzo[a]anthracene	130		9.2	4.5	ug/Kg	⊗	12/14/12 12:54	12/18/12 14:50	1
Benzo[a]pyrene	110		12	6.0	ug/Kg	⊗	12/14/12 12:54	12/18/12 14:50	1
Benzo[b]fluoranthene	200		14	7.0	ug/Kg	⊗	12/14/12 12:54	12/18/12 14:50	1
Benzo[g,h,i]perylene	89		23	5.1	ug/Kg	⊗	12/14/12 12:54	12/18/12 14:50	1
Benzo[k]fluoranthene	67		9.2	4.2	ug/Kg	⊗	12/14/12 12:54	12/18/12 14:50	1
Chrysene	190		10	5.2	ug/Kg	⊗	12/14/12 12:54	12/18/12 14:50	1
Dibenz(a,h)anthracene	28		23	4.7	ug/Kg	⊗	12/14/12 12:54	12/18/12 14:50	1
Fluoranthene	170		23	4.6	ug/Kg	⊗	12/14/12 12:54	12/18/12 14:50	1
Fluorene	23	U	23	4.7	ug/Kg	⊗	12/14/12 12:54	12/18/12 14:50	1
Indeno[1,2,3-cd]pyrene	68		23	8.2	ug/Kg	⊗	12/14/12 12:54	12/18/12 14:50	1
1-Methylnaphthalene	160		46	5.1	ug/Kg	⊗	12/14/12 12:54	12/18/12 14:50	1
2-Methylnaphthalene	230		46	8.2	ug/Kg	⊗	12/14/12 12:54	12/18/12 14:50	1
Naphthalene	120		46	5.1	ug/Kg	⊗	12/14/12 12:54	12/18/12 14:50	1
Phenanthrene	200		9.2	4.5	ug/Kg	⊗	12/14/12 12:54	12/18/12 14:50	1
Pyrene	170		23	4.3	ug/Kg	⊗	12/14/12 12:54	12/18/12 14:50	1
Surrogate		%Recovery	Qualifier		Limits		Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>		72			30 - 130		12/14/12 12:54	12/18/12 14:50	1

TestAmerica Savannah

Client Sample Results

Client: Oneida Total Integrated Enterprises LLC
 Project/Site: 35th Avenue Superfund Site

TestAmerica Job ID: 680-85534-4
 SDG: 68085534-3

Client Sample ID: CV0442B-CS-SP

Date Collected: 12/05/12 14:14
 Date Received: 12/07/12 09:24

Lab Sample ID: 680-85534-56

Matrix: Solid
 Percent Solids: 81.3

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	120	U	120	25	ug/Kg	⊗	12/14/12 12:54	12/18/12 15:08	1
Acenaphthylene	49	U	49	6.2	ug/Kg	⊗	12/14/12 12:54	12/18/12 15:08	1
Anthracene	17		10	5.2	ug/Kg	⊗	12/14/12 12:54	12/18/12 15:08	1
Benzo[a]anthracene	91		9.9	4.8	ug/Kg	⊗	12/14/12 12:54	12/18/12 15:08	1
Benzo[a]pyrene	86		13	6.4	ug/Kg	⊗	12/14/12 12:54	12/18/12 15:08	1
Benzo[b]fluoranthene	150		15	7.5	ug/Kg	⊗	12/14/12 12:54	12/18/12 15:08	1
Benzo[g,h,i]perylene	67		25	5.4	ug/Kg	⊗	12/14/12 12:54	12/18/12 15:08	1
Benzo[k]fluoranthene	49		9.9	4.4	ug/Kg	⊗	12/14/12 12:54	12/18/12 15:08	1
Chrysene	160		11	5.5	ug/Kg	⊗	12/14/12 12:54	12/18/12 15:08	1
Dibenz(a,h)anthracene	25		25	5.1	ug/Kg	⊗	12/14/12 12:54	12/18/12 15:08	1
Fluoranthene	150		25	4.9	ug/Kg	⊗	12/14/12 12:54	12/18/12 15:08	1
Fluorene	25	U	25	5.1	ug/Kg	⊗	12/14/12 12:54	12/18/12 15:08	1
Indeno[1,2,3-cd]pyrene	58		25	8.7	ug/Kg	⊗	12/14/12 12:54	12/18/12 15:08	1
1-Methylnaphthalene	170		49	5.4	ug/Kg	⊗	12/14/12 12:54	12/18/12 15:08	1
2-Methylnaphthalene	270		49	8.7	ug/Kg	⊗	12/14/12 12:54	12/18/12 15:08	1
Naphthalene	150		49	5.4	ug/Kg	⊗	12/14/12 12:54	12/18/12 15:08	1
Phenanthrene	180		9.9	4.8	ug/Kg	⊗	12/14/12 12:54	12/18/12 15:08	1
Pyrene	140		25	4.6	ug/Kg	⊗	12/14/12 12:54	12/18/12 15:08	1
Surrogate		%Recovery	Qualifier		Limits		Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>		71			30 - 130		12/14/12 12:54	12/18/12 15:08	1

Client Sample ID: FM0165CC-CS

Date Collected: 12/06/12 08:55
 Date Received: 12/08/12 09:17

Lab Sample ID: 680-85585-1

Matrix: Solid
 Percent Solids: 73.6

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	140	U	140	27	ug/Kg	⊗	12/14/12 12:54	12/18/12 15:27	1
Acenaphthylene	22	J	54	6.8	ug/Kg	⊗	12/14/12 12:54	12/18/12 15:27	1
Anthracene	52		11	5.7	ug/Kg	⊗	12/14/12 12:54	12/18/12 15:27	1
Benzo[a]anthracene	450		11	5.3	ug/Kg	⊗	12/14/12 12:54	12/18/12 15:27	1
Benzo[a]pyrene	510		14	7.0	ug/Kg	⊗	12/14/12 12:54	12/18/12 15:27	1
Benzo[b]fluoranthene	900		17	8.3	ug/Kg	⊗	12/14/12 12:54	12/18/12 15:27	1
Benzo[g,h,i]perylene	340		27	6.0	ug/Kg	⊗	12/14/12 12:54	12/18/12 15:27	1
Benzo[k]fluoranthene	240		11	4.9	ug/Kg	⊗	12/14/12 12:54	12/18/12 15:27	1
Chrysene	600		12	6.1	ug/Kg	⊗	12/14/12 12:54	12/18/12 15:27	1
Dibenz(a,h)anthracene	100		27	5.6	ug/Kg	⊗	12/14/12 12:54	12/18/12 15:27	1
Fluoranthene	760		27	5.4	ug/Kg	⊗	12/14/12 12:54	12/18/12 15:27	1
Fluorene	29		27	5.6	ug/Kg	⊗	12/14/12 12:54	12/18/12 15:27	1
Indeno[1,2,3-cd]pyrene	280		27	9.6	ug/Kg	⊗	12/14/12 12:54	12/18/12 15:27	1
1-Methylnaphthalene	180		54	6.0	ug/Kg	⊗	12/14/12 12:54	12/18/12 15:27	1
2-Methylnaphthalene	220		54	9.6	ug/Kg	⊗	12/14/12 12:54	12/18/12 15:27	1
Naphthalene	200		54	6.0	ug/Kg	⊗	12/14/12 12:54	12/18/12 15:27	1
Phenanthrene	420		11	5.3	ug/Kg	⊗	12/14/12 12:54	12/18/12 15:27	1
Pyrene	700		27	5.0	ug/Kg	⊗	12/14/12 12:54	12/18/12 15:27	1
Surrogate		%Recovery	Qualifier		Limits		Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>		64			30 - 130		12/14/12 12:54	12/18/12 15:27	1

TestAmerica Savannah

Client Sample Results

Client: Oneida Total Integrated Enterprises LLC
Project/Site: 35th Avenue Superfund Site

TestAmerica Job ID: 680-85534-4
SDG: 68085534-3

Client Sample ID: FM0165DD-CS

Date Collected: 12/06/12 08:58

Date Received: 12/08/12 09:17

Lab Sample ID: 680-85585-2

Matrix: Solid

Percent Solids: 65.3

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	150	U	150	31	ug/Kg	●	12/14/12 12:54	12/18/12 16:22	1
Acenaphthylene	61	U	61	7.6	ug/Kg	●	12/14/12 12:54	12/18/12 16:22	1
Anthracene	51		13	6.4	ug/Kg	●	12/14/12 12:54	12/18/12 16:22	1
Benzo[a]anthracene	250		12	6.0	ug/Kg	●	12/14/12 12:54	12/18/12 16:22	1
Benzo[a]pyrene	220		16	8.0	ug/Kg	●	12/14/12 12:54	12/18/12 16:22	1
Benzo[b]fluoranthene	370		19	9.3	ug/Kg	●	12/14/12 12:54	12/18/12 16:22	1
Benzo[g,h,i]perylene	160		31	6.7	ug/Kg	●	12/14/12 12:54	12/18/12 16:22	1
Benzo[k]fluoranthene	150		12	5.5	ug/Kg	●	12/14/12 12:54	12/18/12 16:22	1
Chrysene	350		14	6.9	ug/Kg	●	12/14/12 12:54	12/18/12 16:22	1
Dibenz(a,h)anthracene	61		31	6.3	ug/Kg	●	12/14/12 12:54	12/18/12 16:22	1
Fluoranthene	370		31	6.1	ug/Kg	●	12/14/12 12:54	12/18/12 16:22	1
Fluorene	58		31	6.3	ug/Kg	●	12/14/12 12:54	12/18/12 16:22	1
Indeno[1,2,3-cd]pyrene	110		31	11	ug/Kg	●	12/14/12 12:54	12/18/12 16:22	1
1-Methylnaphthalene	290		61	6.7	ug/Kg	●	12/14/12 12:54	12/18/12 16:22	1
2-Methylnaphthalene	360		61	11	ug/Kg	●	12/14/12 12:54	12/18/12 16:22	1
Naphthalene	390		61	6.7	ug/Kg	●	12/14/12 12:54	12/18/12 16:22	1
Phenanthrene	450		12	6.0	ug/Kg	●	12/14/12 12:54	12/18/12 16:22	1
Pyrene	300		31	5.7	ug/Kg	●	12/14/12 12:54	12/18/12 16:22	1
Surrogate		%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>		71		30 - 130			12/14/12 12:54	12/18/12 16:22	1

Client Sample ID: FM0165EE-CS

Date Collected: 12/06/12 09:00

Date Received: 12/08/12 09:17

Lab Sample ID: 680-85585-3

Matrix: Solid

Percent Solids: 65.6

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	150	U	150	31	ug/Kg	☀	12/14/12 12:54	12/18/12 16:40	1
Acenaphthylene	61	U	61	7.6	ug/Kg	☀	12/14/12 12:54	12/18/12 16:40	1
Anthracene	50		13	6.4	ug/Kg	☀	12/14/12 12:54	12/18/12 16:40	1
Benzo[a]anthracene	200		12	6.0	ug/Kg	☀	12/14/12 12:54	12/18/12 16:40	1
Benzo[a]pyrene	180		16	8.0	ug/Kg	☀	12/14/12 12:54	12/18/12 16:40	1
Benzo[b]fluoranthene	340		19	9.3	ug/Kg	☀	12/14/12 12:54	12/18/12 16:40	1
Benzo[g,h,i]perylene	140		31	6.7	ug/Kg	☀	12/14/12 12:54	12/18/12 16:40	1
Benzo[k]fluoranthene	90		12	5.5	ug/Kg	☀	12/14/12 12:54	12/18/12 16:40	1
Chrysene	320		14	6.9	ug/Kg	☀	12/14/12 12:54	12/18/12 16:40	1
Dibenz(a,h)anthracene	46		31	6.3	ug/Kg	☀	12/14/12 12:54	12/18/12 16:40	1
Fluoranthene	310		31	6.1	ug/Kg	☀	12/14/12 12:54	12/18/12 16:40	1
Fluorene	31	U	31	6.3	ug/Kg	☀	12/14/12 12:54	12/18/12 16:40	1
Indeno[1,2,3-cd]pyrene	110		31	11	ug/Kg	☀	12/14/12 12:54	12/18/12 16:40	1
1-Methylnaphthalene	260		61	6.7	ug/Kg	☀	12/14/12 12:54	12/18/12 16:40	1
2-Methylnaphthalene	330		61	11	ug/Kg	☀	12/14/12 12:54	12/18/12 16:40	1
Naphthalene	350		61	6.7	ug/Kg	☀	12/14/12 12:54	12/18/12 16:40	1
Phenanthrene	400		12	6.0	ug/Kg	☀	12/14/12 12:54	12/18/12 16:40	1
Pyrene	250		31	5.7	ug/Kg	☀	12/14/12 12:54	12/18/12 16:40	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>	61		30 - 130				12/14/12 12:54	12/18/12 16:40	1

Client Sample Results

Client: Oneida Total Integrated Enterprises LLC
 Project/Site: 35th Avenue Superfund Site

TestAmerica Job ID: 680-85534-4
 SDG: 68085534-3

Client Sample ID: FM0165FF-CS

Date Collected: 12/06/12 09:20
 Date Received: 12/08/12 09:17

Lab Sample ID: 680-85585-4

Matrix: Solid
 Percent Solids: 71.5

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	140	U	140	28	ug/Kg	⊗	12/14/12 12:54	12/18/12 17:17	1
Acenaphthylene	56	U	56	7.0	ug/Kg	⊗	12/14/12 12:54	12/18/12 17:17	1
Anthracene	56		12	5.9	ug/Kg	⊗	12/14/12 12:54	12/18/12 17:17	1
Benzo[a]anthracene	210		11	5.5	ug/Kg	⊗	12/14/12 12:54	12/18/12 17:17	1
Benzo[a]pyrene	190		15	7.3	ug/Kg	⊗	12/14/12 12:54	12/18/12 17:17	1
Benzo[b]fluoranthene	330		17	8.5	ug/Kg	⊗	12/14/12 12:54	12/18/12 17:17	1
Benzo[g,h,i]perylene	130		28	6.2	ug/Kg	⊗	12/14/12 12:54	12/18/12 17:17	1
Benzo[k]fluoranthene	89		11	5.0	ug/Kg	⊗	12/14/12 12:54	12/18/12 17:17	1
Chrysene	260		13	6.3	ug/Kg	⊗	12/14/12 12:54	12/18/12 17:17	1
Dibenz(a,h)anthracene	41		28	5.7	ug/Kg	⊗	12/14/12 12:54	12/18/12 17:17	1
Fluoranthene	390		28	5.6	ug/Kg	⊗	12/14/12 12:54	12/18/12 17:17	1
Fluorene	35		28	5.7	ug/Kg	⊗	12/14/12 12:54	12/18/12 17:17	1
Indeno[1,2,3-cd]pyrene	110		28	9.9	ug/Kg	⊗	12/14/12 12:54	12/18/12 17:17	1
1-Methylnaphthalene	150		56	6.2	ug/Kg	⊗	12/14/12 12:54	12/18/12 17:17	1
2-Methylnaphthalene	180		56	9.9	ug/Kg	⊗	12/14/12 12:54	12/18/12 17:17	1
Naphthalene	200		56	6.2	ug/Kg	⊗	12/14/12 12:54	12/18/12 17:17	1
Phenanthrene	330		11	5.5	ug/Kg	⊗	12/14/12 12:54	12/18/12 17:17	1
Pyrene	320		28	5.2	ug/Kg	⊗	12/14/12 12:54	12/18/12 17:17	1
Surrogate		%Recovery	Qualifier		Limits		Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>		69			30 - 130		12/14/12 12:54	12/18/12 17:17	1

Client Sample ID: FM0165GG-CS

Date Collected: 12/06/12 09:25
 Date Received: 12/08/12 09:17

Lab Sample ID: 680-85585-5

Matrix: Solid
 Percent Solids: 73.2

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	140	U	140	27	ug/Kg	⊗	12/14/12 12:54	12/18/12 17:36	1
Acenaphthylene	16	J	55	6.8	ug/Kg	⊗	12/14/12 12:54	12/18/12 17:36	1
Anthracene	28		11	5.7	ug/Kg	⊗	12/14/12 12:54	12/18/12 17:36	1
Benzo[a]anthracene	160		11	5.3	ug/Kg	⊗	12/14/12 12:54	12/18/12 17:36	1
Benzo[a]pyrene	150		14	7.1	ug/Kg	⊗	12/14/12 12:54	12/18/12 17:36	1
Benzo[b]fluoranthene	260		17	8.3	ug/Kg	⊗	12/14/12 12:54	12/18/12 17:36	1
Benzo[g,h,i]perylene	110		27	6.0	ug/Kg	⊗	12/14/12 12:54	12/18/12 17:36	1
Benzo[k]fluoranthene	71		11	4.9	ug/Kg	⊗	12/14/12 12:54	12/18/12 17:36	1
Chrysene	200		12	6.1	ug/Kg	⊗	12/14/12 12:54	12/18/12 17:36	1
Dibenz(a,h)anthracene	39		27	5.6	ug/Kg	⊗	12/14/12 12:54	12/18/12 17:36	1
Fluoranthene	250		27	5.5	ug/Kg	⊗	12/14/12 12:54	12/18/12 17:36	1
Fluorene	27	U	27	5.6	ug/Kg	⊗	12/14/12 12:54	12/18/12 17:36	1
Indeno[1,2,3-cd]pyrene	87		27	9.7	ug/Kg	⊗	12/14/12 12:54	12/18/12 17:36	1
1-Methylnaphthalene	100		55	6.0	ug/Kg	⊗	12/14/12 12:54	12/18/12 17:36	1
2-Methylnaphthalene	130		55	9.7	ug/Kg	⊗	12/14/12 12:54	12/18/12 17:36	1
Naphthalene	200		55	6.0	ug/Kg	⊗	12/14/12 12:54	12/18/12 17:36	1
Phenanthrene	200		11	5.3	ug/Kg	⊗	12/14/12 12:54	12/18/12 17:36	1
Pyrene	210		27	5.0	ug/Kg	⊗	12/14/12 12:54	12/18/12 17:36	1
Surrogate		%Recovery	Qualifier		Limits		Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>		75			30 - 130		12/14/12 12:54	12/18/12 17:36	1

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Event QAPP for the 35th Avenue Removal Site, Birmingham, Alabama, Sampling Event

Client Sample Results

Client: Oneida Total Integrated Enterprises LLC
 Project/Site: 35th Avenue Superfund Site

TestAmerica Job ID: 680-85534-4
 SDG: 68085534-3

Client Sample ID: FM0165HH-CS

Date Collected: 12/06/12 10:05
 Date Received: 12/08/12 09:17

Lab Sample ID: 680-85585-6

Matrix: Solid
 Percent Solids: 77.2

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	130	U	130	26	ug/Kg	⊗	12/14/12 12:54	12/18/12 17:54	1
Acenaphthylene	52	U	52	6.5	ug/Kg	⊗	12/14/12 12:54	12/18/12 17:54	1
Anthracene	85		11	5.4	ug/Kg	⊗	12/14/12 12:54	12/18/12 17:54	1
Benzo[a]anthracene	600		10	5.0	ug/Kg	⊗	12/14/12 12:54	12/18/12 17:54	1
Benzo[a]pyrene	700		13	6.7	ug/Kg	⊗	12/14/12 12:54	12/18/12 17:54	1
Benzo[b]fluoranthene	1100		16	7.9	ug/Kg	⊗	12/14/12 12:54	12/18/12 17:54	1
Benzo[g,h,i]perylene	450		26	5.7	ug/Kg	⊗	12/14/12 12:54	12/18/12 17:54	1
Benzo[k]fluoranthene	440		10	4.7	ug/Kg	⊗	12/14/12 12:54	12/18/12 17:54	1
Chrysene	770		12	5.8	ug/Kg	⊗	12/14/12 12:54	12/18/12 17:54	1
Dibenz(a,h)anthracene	140		26	5.3	ug/Kg	⊗	12/14/12 12:54	12/18/12 17:54	1
Fluoranthene	1100		26	5.2	ug/Kg	⊗	12/14/12 12:54	12/18/12 17:54	1
Fluorene	26	U	26	5.3	ug/Kg	⊗	12/14/12 12:54	12/18/12 17:54	1
Indeno[1,2,3-cd]pyrene	450		26	9.2	ug/Kg	⊗	12/14/12 12:54	12/18/12 17:54	1
1-Methylnaphthalene	210		52	5.7	ug/Kg	⊗	12/14/12 12:54	12/18/12 17:54	1
2-Methylnaphthalene	250		52	9.2	ug/Kg	⊗	12/14/12 12:54	12/18/12 17:54	1
Naphthalene	270		52	5.7	ug/Kg	⊗	12/14/12 12:54	12/18/12 17:54	1
Phenanthrene	550		10	5.0	ug/Kg	⊗	12/14/12 12:54	12/18/12 17:54	1
Pyrene	1000		26	4.8	ug/Kg	⊗	12/14/12 12:54	12/18/12 17:54	1
Surrogate		%Recovery	Qualifier		Limits		Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>		72			30 - 130		12/14/12 12:54	12/18/12 17:54	1

Client Sample ID: FM0165II-CS

Date Collected: 12/06/12 10:07
 Date Received: 12/08/12 09:17

Lab Sample ID: 680-85585-7

Matrix: Solid
 Percent Solids: 76.3

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	160		130	26	ug/Kg	⊗	12/14/12 12:54	12/18/12 18:12	1
Acenaphthylene	58		52	6.5	ug/Kg	⊗	12/14/12 12:54	12/18/12 18:12	1
Anthracene	640		11	5.5	ug/Kg	⊗	12/14/12 12:54	12/18/12 18:12	1
Benzo[k]fluoranthene	4200		10	4.7	ug/Kg	⊗	12/14/12 12:54	12/18/12 18:12	1
Dibenz(a,h)anthracene	1400		26	5.4	ug/Kg	⊗	12/14/12 12:54	12/18/12 18:12	1
Fluorene	130		26	5.4	ug/Kg	⊗	12/14/12 12:54	12/18/12 18:12	1
Indeno[1,2,3-cd]pyrene	4000		26	9.3	ug/Kg	⊗	12/14/12 12:54	12/18/12 18:12	1
1-Methylnaphthalene	210		52	5.8	ug/Kg	⊗	12/14/12 12:54	12/18/12 18:12	1
2-Methylnaphthalene	270		52	9.3	ug/Kg	⊗	12/14/12 12:54	12/18/12 18:12	1
Naphthalene	250		52	5.8	ug/Kg	⊗	12/14/12 12:54	12/18/12 18:12	1
Phenanthrene	2700		10	5.1	ug/Kg	⊗	12/14/12 12:54	12/18/12 18:12	1
Surrogate		%Recovery	Qualifier		Limits		Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>		71			30 - 130		12/14/12 12:54	12/18/12 18:12	1

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	5300		42	20	ug/Kg	⊗	12/14/12 12:54	12/19/12 15:38	4
Benzo[a]pyrene	6000		54	27	ug/Kg	⊗	12/14/12 12:54	12/19/12 15:38	4
Benzo[b]fluoranthene	8500		64	32	ug/Kg	⊗	12/14/12 12:54	12/19/12 15:38	4
Benzo[g,h,i]perylene	4400		100	23	ug/Kg	⊗	12/14/12 12:54	12/19/12 15:38	4
Chrysene	5200		47	24	ug/Kg	⊗	12/14/12 12:54	12/19/12 15:38	4

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Sample results have been qualified by URIS in accordance with the Non-Industrial Use Property Sampling Event QAPP for the 35th Avenue Removal Site, Birmingham, Alabama, Revision 1 (OTIE, October 2012)

TestAmerica Savannah

Client Sample Results

Client: Oneida Total Integrated Enterprises LLC
 Project/Site: 35th Avenue Superfund Site

TestAmerica Job ID: 680-85534-4
 SDG: 68085534-3

Client Sample ID: FM0165II-CS

Date Collected: 12/06/12 10:07
 Date Received: 12/08/12 09:17

Lab Sample ID: 680-85585-7

Matrix: Solid
 Percent Solids: 76.3

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels - DL (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	7300		100	21	ug/Kg	⊗	12/14/12 12:54	12/19/12 15:38	4
Pyrene	6400		100	19	ug/Kg	⊗	12/14/12 12:54	12/19/12 15:38	4

Client Sample ID: FM0165JJ-CS

Date Collected: 12/06/12 11:00
 Date Received: 12/08/12 09:17

Lab Sample ID: 680-85585-8

Matrix: Solid
 Percent Solids: 79.0

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	79	J	130	25	ug/Kg	⊗	12/20/12 10:19	12/20/12 17:54	1
Acenaphthylene	15	J	50	6.3	ug/Kg	⊗	12/20/12 10:19	12/20/12 17:54	1
Anthracene	180		11	5.3	ug/Kg	⊗	12/20/12 10:19	12/20/12 17:54	1
Benzo[a]anthracene	750		10	4.9	ug/Kg	⊗	12/20/12 10:19	12/20/12 17:54	1
Benzo[a]pyrene	600		13	6.5	ug/Kg	⊗	12/20/12 10:19	12/20/12 17:54	1
Benzo[b]fluoranthene	890		15	7.6	ug/Kg	⊗	12/20/12 10:19	12/20/12 17:54	1
Benzo[g,h,i]perylene	290		25	5.5	ug/Kg	⊗	12/20/12 10:19	12/20/12 17:54	1
Benzo[k]fluoranthene	370		10	4.5	ug/Kg	⊗	12/20/12 10:19	12/20/12 17:54	1
Chrysene	780		11	5.6	ug/Kg	⊗	12/20/12 10:19	12/20/12 17:54	1
Dibenz(a,h)anthracene	160		25	5.1	ug/Kg	⊗	12/20/12 10:19	12/20/12 17:54	1
Fluoranthene	1500		25	5.0	ug/Kg	⊗	12/20/12 10:19	12/20/12 17:54	1
Fluorene	54		25	5.1	ug/Kg	⊗	12/20/12 10:19	12/20/12 17:54	1
Indeno[1,2,3-cd]pyrene	210		25	8.9	ug/Kg	⊗	12/20/12 10:19	12/20/12 17:54	1
1-Methylnaphthalene	42	J	50	5.5	ug/Kg	⊗	12/20/12 10:19	12/20/12 17:54	1
2-Methylnaphthalene	52		50	8.9	ug/Kg	⊗	12/20/12 10:19	12/20/12 17:54	1
Naphthalene	65		50	5.5	ug/Kg	⊗	12/20/12 10:19	12/20/12 17:54	1
Phenanthrene	800		10	4.9	ug/Kg	⊗	12/20/12 10:19	12/20/12 17:54	1
Pyrene	1100		25	4.6	ug/Kg	⊗	12/20/12 10:19	12/20/12 17:54	1
Surrogate		%Recovery		Qualifier		Limits			
<i>o-Terphenyl</i>		67				30 - 130			
							Prepared	Analyzed	Dil Fac
							12/20/12 10:19	12/20/12 17:54	1

Client Sample ID: FM0165KK-CS

Date Collected: 12/06/12 11:05
 Date Received: 12/08/12 09:17

Lab Sample ID: 680-85585-9

Matrix: Solid
 Percent Solids: 76.8

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	34	J	130	26	ug/Kg	⊗	12/20/12 10:19	12/20/12 18:09	1
Acenaphthylene	9.3	J	52	6.5	ug/Kg	⊗	12/20/12 10:19	12/20/12 18:09	1
Anthracene	74		11	5.5	ug/Kg	⊗	12/20/12 10:19	12/20/12 18:09	1
Benzo[a]anthracene	560		10	5.1	ug/Kg	⊗	12/20/12 10:19	12/20/12 18:09	1
Benzo[a]pyrene	460		14	6.8	ug/Kg	⊗	12/20/12 10:19	12/20/12 18:09	1
Benzo[b]fluoranthene	890		16	7.9	ug/Kg	⊗	12/20/12 10:19	12/20/12 18:09	1
Benzo[g,h,i]perylene	340		26	5.7	ug/Kg	⊗	12/20/12 10:19	12/20/12 18:09	1
Benzo[k]fluoranthene	390		10	4.7	ug/Kg	⊗	12/20/12 10:19	12/20/12 18:09	1
Chrysene	640		12	5.9	ug/Kg	⊗	12/20/12 10:19	12/20/12 18:09	1
Dibenz(a,h)anthracene	170		26	5.3	ug/Kg	⊗	12/20/12 10:19	12/20/12 18:09	1
Fluoranthene	1100		26	5.2	ug/Kg	⊗	12/20/12 10:19	12/20/12 18:09	1
Fluorene	25	J	26	5.3	ug/Kg	⊗	12/20/12 10:19	12/20/12 18:09	1
Indeno[1,2,3-cd]pyrene	260		26	9.2	ug/Kg	⊗	12/20/12 10:19	12/20/12 18:09	1

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Sample results have been qualified by URIS in accordance with the Non-Industrial Use Property Sampling Event QAPP for the 35th Avenue Removal Site, Birmingham, Alabama, Revision 1 (OTIE, October 2012)

Client Sample Results

Client: Oneida Total Integrated Enterprises LLC
 Project/Site: 35th Avenue Superfund Site

TestAmerica Job ID: 680-85534-4
 SDG: 68085534-3

Client Sample ID: FM0165KK-CS

Date Collected: 12/06/12 11:05
 Date Received: 12/08/12 09:17

Lab Sample ID: 680-85585-9

Matrix: Solid
 Percent Solids: 76.8

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	62		52	5.7	ug/Kg	⊗	12/20/12 10:19	12/20/12 18:09	1
2-Methylnaphthalene	78		52	9.2	ug/Kg	⊗	12/20/12 10:19	12/20/12 18:09	1
Naphthalene	120		52	5.7	ug/Kg	⊗	12/20/12 10:19	12/20/12 18:09	1
Phenanthrene	440		10	5.1	ug/Kg	⊗	12/20/12 10:19	12/20/12 18:09	1
Pyrene	800		26	4.8	ug/Kg	⊗	12/20/12 10:19	12/20/12 18:09	1
Surrogate							Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>	63			30 - 130			12/20/12 10:19	12/20/12 18:09	1

Client Sample ID: FM0165LL-GS

Date Collected: 12/06/12 10:59
 Date Received: 12/08/12 09:17

Lab Sample ID: 680-85585-10

Matrix: Solid
 Percent Solids: 77.0

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	150		130	26	ug/Kg	⊗	12/20/12 10:19	12/20/12 18:25	1
Acenaphthylene	17	J	51	6.4	ug/Kg	⊗	12/20/12 10:19	12/20/12 18:25	1
Anthracene	370		11	5.4	ug/Kg	⊗	12/20/12 10:19	12/20/12 18:25	1
Benzo[a]anthracene	1800		10	5.0	ug/Kg	⊗	12/20/12 10:19	12/20/12 18:25	1
Benzo[a]pyrene	1300		13	6.7	ug/Kg	⊗	12/20/12 10:19	12/20/12 18:25	1
Benzo[b]fluoranthene	1800		16	7.8	ug/Kg	⊗	12/20/12 10:19	12/20/12 18:25	1
Benzo[g,h,i]perylene	770		26	5.6	ug/Kg	⊗	12/20/12 10:19	12/20/12 18:25	1
Benzo[k]fluoranthene	990		10	4.6	ug/Kg	⊗	12/20/12 10:19	12/20/12 18:25	1
Chrysene	1900		12	5.8	ug/Kg	⊗	12/20/12 10:19	12/20/12 18:25	1
Dibenz(a,h)anthracene	460		26	5.3	ug/Kg	⊗	12/20/12 10:19	12/20/12 18:25	1
Fluoranthene	3700		26	5.1	ug/Kg	⊗	12/20/12 10:19	12/20/12 18:25	1
Fluorene	110		26	5.3	ug/Kg	⊗	12/20/12 10:19	12/20/12 18:25	1
Indeno[1,2,3-cd]pyrene	620		26	9.1	ug/Kg	⊗	12/20/12 10:19	12/20/12 18:25	1
1-Methylnaphthalene	110		51	5.6	ug/Kg	⊗	12/20/12 10:19	12/20/12 18:25	1
2-Methylnaphthalene	140		51	9.1	ug/Kg	⊗	12/20/12 10:19	12/20/12 18:25	1
Naphthalene	180		51	5.6	ug/Kg	⊗	12/20/12 10:19	12/20/12 18:25	1
Phenanthrene	1700		10	5.0	ug/Kg	⊗	12/20/12 10:19	12/20/12 18:25	1
Pyrene	2600		26	4.8	ug/Kg	⊗	12/20/12 10:19	12/20/12 18:25	1
Surrogate							Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>	54			30 - 130			12/20/12 10:19	12/20/12 18:25	1

Client Sample ID: FM0165MM-GS

Date Collected: 12/06/12 11:25
 Date Received: 12/08/12 09:17

Lab Sample ID: 680-85585-11

Matrix: Solid
 Percent Solids: 84.2

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	990		120	24	ug/Kg	⊗	12/20/12 10:19	12/20/12 18:40	1
Acenaphthylene	36	J	48	5.9	ug/Kg	⊗	12/20/12 10:19	12/20/12 18:40	1
Anthracene	1900		10	5.0	ug/Kg	⊗	12/20/12 10:19	12/20/12 18:40	1
Benzo[g,h,i]perylene	2400		24	5.2	ug/Kg	⊗	12/20/12 10:19	12/20/12 18:40	1
Benzo[k]fluoranthene	2100		9.5	4.3	ug/Kg	⊗	12/20/12 10:19	12/20/12 18:40	1
Dibenz(a,h)anthracene	1400		24	4.9	ug/Kg	⊗	12/20/12 10:19	12/20/12 18:40	1
Fluorene	830		24	4.9	ug/Kg	⊗	12/20/12 10:19	12/20/12 18:40	1

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 35th Avenue Removal Site, Birmingham, Alabama, Revision 1 (OTIE, October 2012)
 QAPP for the 35th Avenue Removal Site, Birmingham, Alabama, Revision 1 (OTIE, October 2012)
 Sampling Event Property Sampling Event in accordance with the Non-Industrial Use Qualification
 Sample results have been qualified by URS in accordance with the Non-Industrial Use Qualification

Client Sample Results

Client: Oneida Total Integrated Enterprises LLC
Project/Site: 35th Avenue Superfund Site

TestAmerica Job ID: 680-85534-4
SDG: 68085534-3

Client Sample ID: FM0165MM-GS

Date Collected: 12/06/12 11:25
Date Received: 12/08/12 09:17

Lab Sample ID: 680-85585-11

Matrix: Solid
Percent Solids: 84.2

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	2100		24	8.4	ug/Kg	⊗	12/20/12 10:19	12/20/12 18:40	1
1-Methylnaphthalene	260		48	5.2	ug/Kg	⊗	12/20/12 10:19	12/20/12 18:40	1
2-Methylnaphthalene	320		48	8.4	ug/Kg	⊗	12/20/12 10:19	12/20/12 18:40	1
Naphthalene	260		48	5.2	ug/Kg	⊗	12/20/12 10:19	12/20/12 18:40	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>	82		30 - 130				12/20/12 10:19	12/20/12 18:40	1

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	4000		95	46	ug/Kg	⊗	12/20/12 10:19	12/21/12 11:43	10
Benzo[a]pyrene	3300		120	62	ug/Kg	⊗	12/20/12 10:19	12/21/12 11:43	10
Benzo[b]fluoranthene	4900		140	72	ug/Kg	⊗	12/20/12 10:19	12/21/12 11:43	10
Chrysene	4300		110	53	ug/Kg	⊗	12/20/12 10:19	12/21/12 11:43	10
Fluoranthene	9100		240	48	ug/Kg	⊗	12/20/12 10:19	12/21/12 11:43	10
Phenanthrene	7400		95	46	ug/Kg	⊗	12/20/12 10:19	12/21/12 11:43	10
Pyrene	6500		240	44	ug/Kg	⊗	12/20/12 10:19	12/21/12 11:43	10

Client Sample ID: FM0165NN-GS

Date Collected: 12/06/12 11:31
Date Received: 12/08/12 09:17

Lab Sample ID: 680-85585-12

Matrix: Solid
Percent Solids: 90.7

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	130		110	22	ug/Kg	⊗	12/20/12 10:19	12/20/12 18:55	1
Acenaphthylene	25 J		44	5.5	ug/Kg	⊗	12/20/12 10:19	12/20/12 18:55	1
Anthracene	550		9.2	4.6	ug/Kg	⊗	12/20/12 10:19	12/20/12 18:55	1
Benzo[a]anthracene	2200		8.7	4.3	ug/Kg	⊗	12/20/12 10:19	12/20/12 18:55	1
Benzo[a]pyrene	1500		11	5.7	ug/Kg	⊗	12/20/12 10:19	12/20/12 18:55	1
Benzo[b]fluoranthene	2600		13	6.7	ug/Kg	⊗	12/20/12 10:19	12/20/12 18:55	1
Benzo[g,h,i]perylene	1200		22	4.8	ug/Kg	⊗	12/20/12 10:19	12/20/12 18:55	1
Benzo[k]fluoranthene	1400		8.7	3.9	ug/Kg	⊗	12/20/12 10:19	12/20/12 18:55	1
Chrysene	2600		9.8	4.9	ug/Kg	⊗	12/20/12 10:19	12/20/12 18:55	1
Dibenz(a,h)anthracene	580		22	4.5	ug/Kg	⊗	12/20/12 10:19	12/20/12 18:55	1
Fluorene	120		22	4.5	ug/Kg	⊗	12/20/12 10:19	12/20/12 18:55	1
Indeno[1,2,3-cd]pyrene	840		22	7.8	ug/Kg	⊗	12/20/12 10:19	12/20/12 18:55	1
1-Methylnaphthalene	48		44	4.8	ug/Kg	⊗	12/20/12 10:19	12/20/12 18:55	1
2-Methylnaphthalene	72		44	7.8	ug/Kg	⊗	12/20/12 10:19	12/20/12 18:55	1
Naphthalene	83		44	4.8	ug/Kg	⊗	12/20/12 10:19	12/20/12 18:55	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>	79		30 - 130				12/20/12 10:19	12/20/12 18:55	1

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	4500		87	17	ug/Kg	⊗	12/20/12 10:19	12/21/12 12:05	4
Phenanthrene	2900		35	17	ug/Kg	⊗	12/20/12 10:19	12/21/12 12:05	4
Pyrene	3300		87	16	ug/Kg	⊗	12/20/12 10:19	12/21/12 12:05	4

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Sample results have been qualified by URIS in accordance with the Non-Industrial Use Sampling Event QAPP for the 35th Avenue Removal Site, Birmingham, Alabama, Revision 1 (OTIE, October 2012)

Client Sample Results

Client: Oneida Total Integrated Enterprises LLC
 Project/Site: 35th Avenue Superfund Site

TestAmerica Job ID: 680-85534-4
 SDG: 68085534-3

Client Sample ID: FM0165OO-GS

Date Collected: 12/06/12 11:41
 Date Received: 12/08/12 09:17

Lab Sample ID: 680-85585-13

Matrix: Solid
 Percent Solids: 83.6

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	120	U	120	24	ug/Kg	⊗	12/20/12 10:19	12/20/12 19:10	1
Acenaphthylene	15	J	47	5.9	ug/Kg	⊗	12/20/12 10:19	12/20/12 19:10	1
Anthracene	27		9.9	5.0	ug/Kg	⊗	12/20/12 10:19	12/20/12 19:10	1
Benzo[a]anthracene	120		9.5	4.6	ug/Kg	⊗	12/20/12 10:19	12/20/12 19:10	1
Benzo[a]pyrene	81		12	6.2	ug/Kg	⊗	12/20/12 10:19	12/20/12 19:10	1
Benzo[b]fluoranthene	150		14	7.2	ug/Kg	⊗	12/20/12 10:19	12/20/12 19:10	1
Benzo[g,h,i]perylene	77		24	5.2	ug/Kg	⊗	12/20/12 10:19	12/20/12 19:10	1
Benzo[k]fluoranthene	52		9.5	4.3	ug/Kg	⊗	12/20/12 10:19	12/20/12 19:10	1
Chrysene	140		11	5.3	ug/Kg	⊗	12/20/12 10:19	12/20/12 19:10	1
Dibenz(a,h)anthracene	54		24	4.9	ug/Kg	⊗	12/20/12 10:19	12/20/12 19:10	1
Fluoranthene	170		24	4.7	ug/Kg	⊗	12/20/12 10:19	12/20/12 19:10	1
Fluorene	24	U	24	4.9	ug/Kg	⊗	12/20/12 10:19	12/20/12 19:10	1
Indeno[1,2,3-cd]pyrene	59		24	8.4	ug/Kg	⊗	12/20/12 10:19	12/20/12 19:10	1
1-Methylnaphthalene	50		47	5.2	ug/Kg	⊗	12/20/12 10:19	12/20/12 19:10	1
2-Methylnaphthalene	58		47	8.4	ug/Kg	⊗	12/20/12 10:19	12/20/12 19:10	1
Naphthalene	94		47	5.2	ug/Kg	⊗	12/20/12 10:19	12/20/12 19:10	1
Phenanthrene	120		9.5	4.6	ug/Kg	⊗	12/20/12 10:19	12/20/12 19:10	1
Pyrene	120		24	4.4	ug/Kg	⊗	12/20/12 10:19	12/20/12 19:10	1
Surrogate		%Recovery	Qualifier		Limits		Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>		80			30 - 130		12/20/12 10:19	12/20/12 19:10	1

Client Sample ID: CV0641A-CS-SP

Date Collected: 12/06/12 09:20
 Date Received: 12/08/12 09:17

Lab Sample ID: 680-85585-14

Matrix: Solid
 Percent Solids: 82.4

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	57	J	120	24	ug/Kg	⊗	12/20/12 10:19	12/20/12 19:25	1
Acenaphthylene	68		48	6.0	ug/Kg	⊗	12/20/12 10:19	12/20/12 19:25	1
Anthracene	250		10	5.1	ug/Kg	⊗	12/20/12 10:19	12/20/12 19:25	1
Benzo[a]anthracene	610		9.7	4.7	ug/Kg	⊗	12/20/12 10:19	12/20/12 19:25	1
Benzo[a]pyrene	450		13	6.3	ug/Kg	⊗	12/20/12 10:19	12/20/12 19:25	1
Benzo[b]fluoranthene	740		15	7.4	ug/Kg	⊗	12/20/12 10:19	12/20/12 19:25	1
Benzo[g,h,i]perylene	300		24	5.3	ug/Kg	⊗	12/20/12 10:19	12/20/12 19:25	1
Benzo[k]fluoranthene	310		9.7	4.3	ug/Kg	⊗	12/20/12 10:19	12/20/12 19:25	1
Chrysene	750		11	5.4	ug/Kg	⊗	12/20/12 10:19	12/20/12 19:25	1
Dibenz(a,h)anthracene	160		24	4.9	ug/Kg	⊗	12/20/12 10:19	12/20/12 19:25	1
Fluoranthene	1200		24	4.8	ug/Kg	⊗	12/20/12 10:19	12/20/12 19:25	1
Fluorene	87		24	4.9	ug/Kg	⊗	12/20/12 10:19	12/20/12 19:25	1
Indeno[1,2,3-cd]pyrene	190		24	8.6	ug/Kg	⊗	12/20/12 10:19	12/20/12 19:25	1
1-Methylnaphthalene	140		48	5.3	ug/Kg	⊗	12/20/12 10:19	12/20/12 19:25	1
2-Methylnaphthalene	150		48	8.6	ug/Kg	⊗	12/20/12 10:19	12/20/12 19:25	1
Naphthalene	170		48	5.3	ug/Kg	⊗	12/20/12 10:19	12/20/12 19:25	1
Phenanthrene	870		9.7	4.7	ug/Kg	⊗	12/20/12 10:19	12/20/12 19:25	1
Pyrene	770		24	4.5	ug/Kg	⊗	12/20/12 10:19	12/20/12 19:25	1
Surrogate		%Recovery	Qualifier		Limits		Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>		86			30 - 130		12/20/12 10:19	12/20/12 19:25	1

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